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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,706	12/13/2000	Gabriel Guary	28944/40064	3249
29471 7590 03/13/2007 MCCRACKEN & FRANK LLP 200 W. ADAMS STREET SUITE 2150 CHICAGO, IL 60606			EXAMINER BANTA, TRAVIS R	
			ART UNIT	PAPER NUMBER
			3714	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/719,706

Applicant(s)

GUARY ET AL.

Examiner

Travis R. Banta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-28 and 30-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-28 and 30-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Interference

The request for interference filed December 15, 2006 is acknowledged.

However, examination of this application has not been completed as required by 37 CFR 41.102(a). Consideration of a potential interference is premature. See MPEP § 2303. Claims 1-10, 12, and 13 require displacement of a shooting axis relative to the display system and a virtual actor. Therefore, these claims are defining a patentably distinct invention from the remaining claims. See MPEP 2303 subsection A for guidance on non-interfering claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14, 15, 19, 25, 27, 28, 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claims 14 and 15, the specification teaches that the displacement of the shooting axis is relative to the display system and the virtual actor. This appears to be critical to the operability of the applicant's invention. No disclosure is made to show that the pistol will work absent a virtual actor on the screen. Hence, claims 14 and

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15 provide new matter, in that they appear to encompass an embodiment lacking a critical element of the invention.

With respect to claim 19, Figure 1 shows the directional controller to be on the inclined portion of a slide and not the grip. If the slide were to be gripped on an actual firearm the slide would significantly damage a hand. Therefore the slide cannot be treated as a part of the grip.

With respect to claim 25, although there is disclosure of a simulated recoil device inside the video pistol, there is no mention of an ability to fire a cannonball. There is no suggestion or disclosure that the recoil of a cannonball could be simulated in a hand held video pistol.

With respect to claim 27, the general disclosure on page 2 lines 4-9 indicate that the instant application's effort is to provide a player the ability to move through a game by movement choice. The disclosure does not support a predetermined course.

With respect to claim 28, the general disclosure on page 2 lines 4-9 indicate that the instant application's effort is to provide a player the ability to move through a game by movement choice. The disclosure does not support an objective viewpoint to view the main character rather supports the ability of the main character to view whatever is wished according to the player's desires.

With respect to claim 29, there is no disclosure of a supporting mechanism for rotatably supporting a gun barrel on a pedestal.

Claim 18 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for crosshairs, does not reasonably provide

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enablement for a cursor. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. See MPEP 2304.02(d) for guidance. It is imperative that the disclosure maintain continuity of terms. For example, specifying crosshairs in claim 18 and explaining the equivalence to a cursor would allow crosshairs and cursor be construed as equivalent structures.

Claim 20 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a cable protruding from the bottom of the grip (see Figure 1 of the instant application), does not reasonably provide enablement for a cable protruding from the rear of the grip. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The figure shows the cable extending from the bottom of the grip. The rear of the grip shows no provision for a cable.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the displacement of said shooting axis". There is insufficient antecedent basis for the limitation of displacement in the claim.

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Claim 1 also contains several grammatical errors. Namely, the word "shoots" is likely intended to read "shots", "to send the a..." is likely intended to read "to send a", "an instant chose" is likely intended to read "an instant chosen".

Claim 5 recites "switches an effects". It is likely that this is intended to read "switches an effect".

Appropriate correction or clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 8-10, 13-20, 22-24, 28, and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaye (US 5,038,144). Hereafter "Kaye".

Regarding claim 1, Kaye discloses a pistol for a video game shooting system used by a player to enable a virtual actor to shoot at a virtual target (see column 2 lines 34-52). The system incorporates a display to display an image of the game and a target. The display corresponds to a view of a virtual actor in a game. The system comprises a video game unit which are known to contain microprocessors and connect to displays to provide the player with various images. The pistol is wirelessly connected to the game unit. The pistol has a frame with a grip that defines a shooting axis. The impact point is defined on the screen to cause the depicted object to fire a gun (see column 2 lines 42-45). The pistol has a trigger to allow a player to shoot a virtual bullet

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at the instant a player pulls the trigger. Displacement of the shooting axis relative to the display system and the virtual actor is caused by the orientation of the frame of the pistol relative to the display due to the player's arm movements. The pistol further comprises a means to control the movement of the virtual actor in the field and enables the player to move the actor in the game and shoot at the intended moment.

Regarding claim 2, Kaye discloses a multi-directional control device integrated into the pistol to control the movement of the viewing field of the virtual actor (see figure 4-284 also 240, 242, 250).

Regarding claim 3 and 4, Kaye discloses the multi-directional control device enables the player to move in any direction as the joystick is moved. Directional buttons are provided in Figure 4-286 and 4-288.

Regarding claim 5, Kaye discloses a button to switch effects of the multi-directional control device. The buttons are disclosed to deploy landing gear or actuate flaps or other applicable actions. The multi-directional control device is enabled to allow a virtual actor to move laterally using a wrist turning motion (see elements 4-242, 240, 270).

Regarding claim 6, Kaye discloses a multidirectional control device to allow a player to change the field of view by moving the actor's head (see element 260 and related description).

Regarding claim 8, Kaye discloses a pistol shooting system for triggering shots with a trigger (see figure 4).

Regarding claims 9 and 10, Kaye discloses a game unit and display. These are well known in the art to be applicable to console games as well as PC games as well as their display devices, televisions and computer monitors respectively (see column 2 lines 32-50).

Regarding claim 13, Kaye discloses the pistol is connectable to the game processing means via a wired connection or wireless transmission (see column 2 lines 32-50).

Regarding claim 14, Kaye discloses a gun shaped controller for use with an electronic game device which controls a game development in response to signals supplied from the controller. The device comprises a gun barrel, a grip, a trigger for operation by an index finger of a hand holding the pistol, means for detecting a position of a gun barrel relative to a display and a directional key on the rear of the pistol operable by the thumb of the hand holding the pistol. The directional key provides directional signals to an object displayed on the screen such that the object will move relative to the manipulation of the directional key. See figure 4. The trigger and grip are unlabeled but clearly visible, 204 points to the barrel, means for detecting the position of the barrel are disclosed in column 2 lines 32-50, 284 points to a directional keypad.

Regarding claim 15, Kaye discloses a gun shaped controller for an electronic amusement device. The controller provides a variable (electronic signals), that distinguish the variation of the position of the controller itself while the controller is held by a player. The controller comprises, a gun barrel, a grip, a trigger for operation by a player, a means for supplying directional signals including a directional key to the

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amusement device. The directional key is manually operable by the player. The player uses this control to control the movements of an object on a screen. The device also has means to identify a position of the gun barrel relative to the screen. See column 2 lines 32-50 and figure 4 as indicated above in the rejection of claim 14.

Regarding claim 16, Kaye discloses game development signals with respect to an image displayed on the screen of the display. The directional key is integrally formed with the barrel (see figure 4).

Regarding claim 17, Kaye discloses the multidirectional controller as a joystick which are well known in the art to comprise upward, downward, leftward and rightward components to provide direction.

Regarding claim 18, Kaye discloses the controller to be used to control "a person, plane, car etc" (see column 2 lines 37-38).

Regarding claim 19, Kaye discloses the directional key situated on the upper part of the grip (see figure 4-284).

Regarding claim 20, Kaye discloses a cable at the rear end of the grip (see Figure 4 between elements 204 and 216).

Regarding claim 22, Kaye discloses the directional key is inclined toward the barrel rather than towards the rear face of the grip and is formed continuously to a rear face of the grip (see Figure 4-284).

Regarding claim 23, Kaye discloses the directional key is positioned higher than the tip of the trigger lever with reference to the horizontal standard created by the pistol barrel (see Figure 4).

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Regarding claim 24, Kaye discloses the directional key is positioned approximately in the center of the width of the gun when viewed in the rear. This is shown by matching buttons 286 and 288 positioned on either side of the multi-directional controller.

Regarding claim 30, Kaye discloses the directional key is formed integrally with the gun shaped controller and transmits signals to move at least a main character in a plurality of directions on the screen (see column 2 lines 32-50).

Regarding claim 31, Kaye discloses a controller with a directional key manually operable by the player to provide signals for instructing directions for moving a main character in a plurality of directions (see column 2 lines 32-50 and Figure 4).

Regarding claim 32, Kaye discloses multidirectional controller as a joystick which are well known in the art to comprise upward, downward, leftward and rightward components to provide direction.

Regarding claim 33, Kaye discloses a multidirectional controller wherein signals are supplied to the game for instructing movement directions and controlling movement of characters appearing in a virtual game space (see column 2 lines 32-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaye (US 5,038,144) in view of Igarashi et al. et al. (US 5,569,085).

Regarding claim 7, Kaye teaches a gun shaped controller for use in a video game system. Kaye fails to disclose a system in the controller to simulate recoil. In an analogous machine, Igarashi et al. et al teach a mobile mass recoil simulation system in a game controller. One of ordinary skill in the art would recognize from Igarashi et al. et al.'s disclosure that arcade players can be attracted to a machine by seeing the slide on an arcade game gun controller move back and forth, thus increasing the game's profitability. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to combine a mobile mass recoil system to the game controller as disclosed by Kaye to attract players to play the game and increase profitability.

Regarding claim 25, Kaye teaches a gun shaped controller for use in a video game system. Kaye fails to teach a recoil simulation system to provide recoil to a gun barrel and a virtually fired cannonball. In an analogous machine Igarashi et al. et al. teach a mobile mass recoil simulation system in a game controller. One of ordinary skill in the art would recognize from Igarashi et al. et al.'s disclosure that it arcade

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players would be attracted to a machine by seeing the slide on an arcade game gun controller move back and forth, thus increasing the game's profitability. Therefore, one of ordinary skill in the art at the time of the invention would be motivated to combine Igarashi et al. et al's mobile mass recoil system with the game controller as disclosed by Kaye to attract players to play the game and increase profitability.

With respect to the cannonball, it is obvious to those of skill in the art in light of Igarashi et al. et al. that masses of all kinds can be simulated with varying degree. For example, it would be unwise for an individual to fire a cannon from the wrist as that degree of recoil could cause serious injury. Nonetheless, lesser recoil to simulate the recoil of a cannonball would be advantageous to a player playing an aircraft game, a civil war game, or running an artillery/combat simulator and others to increase enjoyment. One of ordinary skill would recognize these advantages and be motivated to incorporate them into a game and corresponding controller. It would therefore be obvious to anyone of ordinary skill in the art to simulate recoil from pellet guns, paintball guns, Airsoft guns, real firearms of any caliber, cannons, artillery, tanks, catapults, ballistae, crossbows, mortars, grenades etc.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaye in view of Miyake (US 5,310,192).

With regard to claim 12, Kaye teaches a gun shaped controller for a game. Although, Kaye discloses seeing a projectile impact on the screen, Kaye does not disclose visible cross hairs on the screen. In a related device, Miyake teaches a gun shaped controller for use with a video game system that uses a sighting mark. One of

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ordinary skill in the art would recognize that a player could benefit from the ability to use a simulated laser sight to increase accuracy and improve performance in the game. Therefore, one of ordinary skill in the art would be motivated to incorporate a sighting mark into the game controller and system as disclosed by Kaye to increase the player's ability to aim and perform in the game. The examiner would also like to note that a sighting mark is deemed to encompass, cross hairs, a dot, parallax, mil-dots, silhouette, or any other type of reticle.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaye. Kaye discloses operation buttons on the front of the grip and two others directly to the sides and slightly below the joystick controller. Since the buttons as claimed would function just as well on the upper part of the directional key as they do below the directional key, it is deemed a matter of obvious design choice to put the buttons in a different location than that disclosed by Kaye. No improvement or function is disclosed as providing an advantage for the buttons to be on the upper part of the directional pad over being below it.

Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaye in view of the Nintendo game Contra (1988) as described by <http://ccat.sas.upenn.edu/~tdemores/images/fun/contra/> and "Base 1" described by this secondary link <http://ccat.sas.upenn.edu/~tdemores/images/fun/contra/level2.html>.

With regard to claim 26, Kaye discloses a gun shaped controller for use with video games. He discloses a gaming system for use with the controller but does not specifically teach game styles. In a similar system, Nintendo teaches the game Contra.

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Contra comprises several levels with enemies at the end of each level for the virtual actors to battle via the player manipulating a controller. These signals provide instructions to the machine and the gaming system to move the main characters on the screen to attack the enemy characters. The game machine processes a predetermined game program to move the characters pursuant to the signals developed from the controller to progress the game. One of ordinary skill in the art would recognize that a gun shaped controller such as the one disclosed by Kaye would provide the player an added element of enjoyment of the game. Therefore, it would have been obvious to one of ordinary skill in the art to combine the controller disclosed by Kaye with the game system and game as disclosed by Nintendo, to increase player enjoyment.

With respect to claim 27, Nintendo teaches a game machine for forming images of the main character. Contra requires the players to move along a predetermined course as shown on the secondary link in "Base 1". In this case the predetermined course is through a series of rooms in the base.

Response to Arguments

The Examiner has withdrawn the new matter rejections under 35 U.S.C. 112 for claims 18 and 20 made in the last office action. They are now rejected for written descriptions as explained in the rejections above.

With respect to claim 19, the Applicant has argued that the surface with the directional pad is part of the grip. The Examiner disagrees with this assertion. The grip is ergonomically situated for a hand. The drawings in the applicants figure show clearly a raised surface sloping longitudinally away from the players hand to create an incline

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for the directional pad relative to the barrel. The directional pad is construed to be part of the slide and therefore not on the handle. The slide is not an extension of the grip because if it were held on an actual firearm it would cause significant damage to a shooter's hand.

With respect to claim 21, the Applicant has argued that any ergonomic position would be acceptable for the position of the control button. The Examiner agrees with this statement. However, the disclosure does not specifically teach that the button would be situated above the directional key. In fact, the Examiner feels that the button would be more advantageously positioned ergonomically in the position as shown by Kaye. Nonetheless, the examiner has determined that an invitation to experiment with the position of the control button is not specific enough to warrant the claimed exact positioning of the button above the directional pad.

With respect to claim 25, the applicant has argued that the firing of a virtual bullet is the same as disclosing a cannonball. An invitation to change projectiles does not show possession of the specificity claimed. This is especially true when no provision has been made in the disclosure to simulate recoil which is significantly more pronounced for a cannon than a pistol. A virtual bullet is deemed to be different from a cannonball. The recitation of a "cannonball" in the claims is beyond the scope of a virtual bullet.

With respect to claims 27 and 28, The applicant has argued that moving a virtual actor through a game environment is the same as a the actor moving through a predetermined course. The Examiner respectfully disagrees. There is a marked

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difference between games that have a predetermined course like Time Crisis or Contra when compared with games such as Half Life, Counter Strike, or Medal of Honor. While in the latter example general objectives are given to the player, it is up to the player to choose a path to fulfill the objective that is most appealing to the player. In the former example, the computer has a predetermined course where the players are taken by camera view from stage to stage to fulfill the next objective without choice of skipping the stage or going another direction. A player in Counter Strike can move within the game environment but does not move through a predetermined course. A player in Time Crisis is moved through the game environment on a predetermined course. There is no disclosure of a predetermined course and this is respectfully maintained as new matter.

With respect to claim 33, the Examiner made a typographical error and was mistaken. The Examiner apologizes for the error and appreciates the Applicant's indulgence on the matter. The new matter rejection to claim 33 is withdrawn.

Applicant's arguments with respect to the prior art of Yamaguchi and the 3D Zonemaster have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Banta whose telephone number is (571) 272-1615. The examiner can normally be reached on Monday-Friday 9-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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